1. Will this new course affect a current program? □ Yes □ No
   If "yes", has a Program Revision Form been submitted concurrently? □ Yes □ No

2. Teaching Department: School of Computer Science

3. Administering Faculty/Unit: Graduate and Postdoctoral Studies

4. Campus (Downtown, Macdonald, Off Campus, Distance Ed, Other – specify)
   Term: 200509

5. Effective Term of Implementation (Ex. Sept. 2004 = 200409)
   Term: 200509

6. Course Title (Limit 30 Characters) - required for all courses:
   Functional Genomics

7. Course Number(s)
   Subject/course number: COMP 618
   Course(s) Span:
   □ 1 term
   □ 2 consecutive terms (D1, D2)
   □ 2 non-consecutive terms (N1, N2)
   □ 3 terms (J1, J2, J3)

8. Course Title to Appear in the Calendar (optional)
   (Limit 59 characters):
   Note: This can ONLY be an expansion of word(s) abbreviated in the 30 character course title above.
   Bioinformatics: Functional Genomics

9. Credit Weight
   (or CEU's for non-credit CE courses):
   3

10. Schedule Type(s):
    (Enter all that apply – see form, STVSCHD in Banner for a complete list.)
    (i.e. Lecture, Labs, Tutorial)
    Hours per Week

    | Type       | Hours per Week |
    |------------|---------------|
    | Lecture    | 3.0           |
    | Labs       |               |
    | Tutorial   |               |
    |             |               |

    Total Hours per Week: 3.0

    Total Number of Weeks: 13

11. Projected Enrolment:
    30
12. Prerequisite(s) (Courses or Tests)
Specify course number(s) or name(s) of test(s):

Enrollment in Bioinformatics Option Program or permission of
 coordinators

If the student does not have a prerequisite should web registration be blocked?
☐ Yes ☐ No

If “Yes” complete A and B:

A. Indicate minimum grade or test score(s) the student must attain in prerequisite course(s) or test(s):

B. Can the prerequisite course(s) or test(s) be taken in the same term as this course?
☐ Yes ☐ No

13. Corequisite(s) Course Number(s):
Specify course number(s) and title(s):

If the student does not register for the corequisite in the same term should web registration be blocked?
☐ Yes ☐ No

14. Consultation Reports Attached
☐ Yes ☐ N/A

15. Additional Course Charges (must be approved by the Fee Policy Committee)
Description of Fee
(e.g. screening fee) Amount

16. Requires Teaching, Physical, or Financial Resources
Not Currently Available (attach explanation)
☐ Yes ☐ No

17. Other Information (specify):

18. Course Description
(as it will appear in the Calendar [maximum 50 words]):
(N.B. Faculty of Medicine must append complete course outline)

Techniques related to microarrays (normalization, differential expression, class prediction, class discovery), the analysis of non-coding sequence data (identification of transcription factor binding sites), single nucleotide polymorphisms, the inference of biological networks, and integrative Bioinformatics approaches.

19. Supplementary information to appear in the Calendar in addition to the course description.
Such as: registration restriction(s), prerequisite(s), corequisite(s), equivalent course(s), contact hours, enrolment limitations, language of instruction etc.
Please enter the information as it should appear in the calendar notes.

Enrollment by students in the Bioinformatics Option Program or by permission of course coordinators only.
Computer science graduate students not in the Bioinformatics Option Program need additional permission of the M.Sc. or Ph.D. Committee respectively.

20. Rationale

The intention of this course is to introduce graduate students in the Bioinformatics option program to current Bioinformatics techniques used in Functional Genomics. Students will learn to discuss material related to various biotechnologies and assays currently used in this field in an inter-disciplinary setting with experts in the field. This course is one of the four Bioinformatics Option courses.
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| Departmental Contact Person (name/phone/email) | Michael Hallett- Computer Science – 398-5928 hallet@mcb.mcgill.ca |